

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A single channel method for estimating a halftone screen frequency from image data, comprising:
 - multiplying a frequency measurement signal by a factor;
 - adding the multiplied frequency measurement signal to an image data signal to produce an output signal; ~~and~~
 - adjusting the factor multiplied to the frequency measurement signal based on a control signal, wherein the control signal is based on a characteristic of the image data; ~~and~~
 - interpolating the output signal to produce the halftone screen frequency estimate.
2. (Original) The method of claim 1, further comprising:
measuring a contrast within a window of the image data to produce the control signal.
3. (Original) The method of claim 1, further comprising:
filtering the image data using a low-pass filter to produce the image data signal.
4. (Original) The method of claim 1, further comprising:
sub-sampling the image data to produce the image data signal.
5. (Canceled)
6. (Original) The method of claim 1, further comprising:
subtracting a frequency signal from the image data signal, to produce the frequency measurement signal.

7. (Currently Amended) The method of claim 1, further comprising:
outputting the output signal which is an estimate of the halftone screen frequency, to a de-screening device.

8. (Currently Amended) An apparatus for estimating a halftone screen frequency, comprising:
a multiplier which multiplies a frequency measurement signal by a factor;
a combiner which combines the multiplied frequency measurement signal with an image data signal to produce an output signal; ~~and~~
an adjuster which adjusts the factor multiplied to the frequency measurement signal based on a control signal, ~~the control signal being~~ wherein the control signal is based on a characteristic of the image data; and
an interpolator for interpolating the output signal to produce the halftone screen frequency estimate.

9. (Original) The apparatus of claim 8, further comprising:
a contrast measuring device which measures contrast within a window of the image data to produce the control signal.

10. (Original) The apparatus of claim 8, further comprising:
a low-pass filter for filtering the image data to produce the image data signal.

11. (Original) The apparatus of claim 8, further comprising:
a sub-sampling filter for sub-sampling the image data to produce the image data signal.

12. (Canceled)

13. (Original) The apparatus of claim 8, further comprising:
a subtracting module for subtracting a frequency measurement from the image data signal, to produce the frequency measurement signal.

14. (Currently Amended) The apparatus of claim 8, further comprising:
an output device for outputting to a de-screening device the output signal
which is an estimate of the halftone screen frequency.

15. (Currently Amended) ~~An~~ A single channel apparatus for estimating a halftone
screen frequency, comprising:

means for combining a multiplied frequency measurement signal with an
image data signal to produce an output signal; ~~and~~

means for adjusting a factor multiplied to the frequency measurement signal;
and

means for interpolating the halftone screen frequency.

16. (Currently Amended) The apparatus of claim 15, further comprising:

means for measuring ~~contrast~~ a contrast of the image data;

means ~~producing for~~ producing the image data signal; and

~~means for producing the screen frequency estimate; and~~

~~means producing for~~ generating the frequency measurement signal.

17. (Currently Amended) A tangible computer-readable medium that stores
computer-executable instruction which, when executed by a computer, causes the computer
~~or a carrier wave encoded to~~ perform the method of claim 1.

18. (Canceled)

19. (Canceled)